

CLAIMS

1. A fat containing product having reduced trans fat levels, comprising;
an oil or fat derived from grain, vegetable, or animal based components or combinations thereof; and
an amount of cyclodextrin ranging from 0.001% to 75% by weight of said oil or fat that is mixed with said fat or oil to produce a fat containing product for use in a food product or food intermediate.
2. A fat containing product as recited in claim 1, wherein said cyclodextrin is selected from a group including alpha-cyclodextrin, beta-cyclodextrin, gamma-cyclodextrin and combinations thereof.
3. A fat containing product as recited in claim 1, wherein said cyclodextrin is a chemically or enzymatically produced derivative of alpha-cyclodextrin, beta-cyclodextrin, gamma-cyclodextrin and combinations thereof.
4. A fat containing product as recited in claim 1, wherein said cyclodextrin is formed in or on the fat product by treatment with the enzyme, cyclodextrin glucosyltransferase (CGTase, EC 2.4.1.19) or a mutation or modification thereof.
5. A fat containing product as recited in claim 1, wherein said cyclodextrin is already present in the fat by expression of a gene encoding cyclodextrin glucosyltransferase (CGTase, EC 2.4.1.19) or a mutation or modification thereof.
6. A fat containing product as recited in claim 1, wherein said fat containing product also has beneficial hypocholesterolemic properties.
7. A fat containing product as recited in claim 1, wherein said cyclodextrin has been hydrated.

8. A fat containing product as recited in claim 1, wherein said fat containing product is made from an oil or fat with triglycerides comprised of fatty acids with chain length of C2-C28 with unsaturation of zero to six double bonds on any given fatty acid chain.

9. A fat containing product as recited in claim 1, wherein said fat product is comprised of an emulsifier.

10. A fat containing product as recited in claim 1, wherein said fat product is made from an oil or fat with free fatty acids having chain length of C2-C28 with unsaturation of zero to six double bonds on any given fatty acid.

11. A fat containing product as recited in claim 1, wherein said fat product is comprised of beta glucan.

12. A fat containing product as recited in claim 11, wherein the beta glucans is derived from oat, barley, rye, wheat, or yeast.

13. A fat containing product as recited in claim 1, wherein said containing product is selected from a group including baked goods, muffins, rolls, cakes, pies, crackers, toaster pastries, pastries, grain based bars, granola bars, health food bars, breads, cereals, fruit snacks, fruit bars, pizza rolls, soups, pasta, yogurt, pudding, beverages, sauces, snacks, potato crisps, French fries, corn chips, tortilla chips, extruded snacks, enrobed extruded snacks, pretzels, popcorn, rice and corn cakes, fried and processed foods.

14. A method for producing a fat containing product having a reduced trans fat levels comprising the steps of;
providing one or more ingredients useful in forming a fat containing product;

adding to said one or more ingredients an amount of cyclodextrin, selected from a group including alpha-cyclodextrin, beta-cyclodextrin, gamma-cyclodextrin and or combinations thereof;
producing said fat containing product containing said amount of cyclodextrin;
and
distributing said fat containing product or a food product containing a portion thereof for consumption.

15. A method as recited in claim 14, wherein said amount of cyclodextrin is selected from a group including alpha-cyclodextrin, beta-cyclodextrin, gamma-cyclodextrin and combinations thereof.

16. A method as recited in claim 14, wherein said amount of cyclodextrin ranges from 0.01 to 75% by weight of said fat product.

17. A method as recited in claim 14, wherein said fat product is freeze dried, dehydrated, or evaporated to remove water.

18. A method as recited in claim 14, wherein said one or more ingredients includes a grain based ingredient.

19. A method as recited in claim 14, wherein said one or more ingredients includes a vegetable based ingredient.

20. A method as recited in claim 19, wherein said vegetable is a potato.

21. A method as recited in claim 14, including a further step of adding beta glucan after the addition of the cyclodextrin.

22. A method as recited in claim 14, wherein said fat containing product is selected from a group including baked goods, muffins, rolls, cakes, pies, crackers, toaster pastries, pastries, grain based bars, granola bars, health food bars, breads,

cereals, fruit snacks, fruit bars, pizza rolls, soups, pasta, yogurt, pudding, beverages, sauces, snacks, potato crisps, French fries, corn chips, tortilla chips, extruded snacks, enrobed extruded snacks, pretzels, popcorn, rice and corn cakes, fried and processed foods.

23. A method of communicating a beneficial effect of a food product or fat having reduced trans fat levels, hypercholesterolemic, or caloric properties comprising the steps of;

providing a fat product or food product having an amount of cyclodextrin;
packaging said fat product or food product;

producing a message relating to said fat product or food product and its reduced trans fat levels, hypercholesterolemic, caloric properties or combinations thereof;

distributing said fat product or food product to consumers for consumption;
and

communicating said message along with said fat product or food product.

24. A method of communicating a beneficial effect as recited in claim 23, wherein said amount of cyclodextrin ranges from 0.01 to 75% by weight of said fat product or food product.

25. A method of communicating a beneficial effect as recited in claim 23, wherein the step of communicating the message is accomplished through at least one of television, radio, printed communications, over a global computer network and combinations thereof.

26. A method of communicating a beneficial effect as recited in claim 23, wherein said food product is selected from a group including baked goods, muffins, rolls, cakes, pies, crackers, toaster pastries, pastries, grain based bars, granola bars, health food bars, breads, cereals, fruit snacks, fruit bars, pizza rolls, soups, pasta, yogurt, pudding, beverages, sauces, snacks, potato crisps, French fries, corn chips,

tortilla chips, extruded snacks, enrobed extruded snacks, pretzels, popcorn, rice and corn cakes, fried and processed foods.

27. A vegetable or grain based food product or food intermediate having reduced trans fat levels and containing between 0.01 to 75% by weight of a cyclodextrin.

28. A vegetable or grain based food product or food intermediate as recited in claim 27, wherein said food product or food intermediate is selected from a group including baked goods, muffins, rolls, cakes, pies, crackers, toaster pastries, pastries, grain based bars, granola bars, health food bars, breads, cereals, fruit snacks, fruit bars, pizza rolls, soups, pasta, yogurt, pudding, beverages, sauces, snacks, potato crisps, French fries, corn chips, tortilla chips, extruded snacks, enrobed extruded snacks, pretzels, popcorn, rice and corn cakes, fried and processed foods.

29. A shortening having reduced trans fat levels, comprising;
an oil or fat derived from grain, vegetable, or animal based components or combinations thereof; and

an amount of cyclodextrin ranging from 0.001% to 75% by weight of said fat or oil that is mixed with said fat or oil to produce a shortening for use in a food product or food intermediate.